

**SUPPLEMENTARY EUROPEAN SEARCH  
REPORT**Application number:  
EP 22 84 92 74**Classification of the application (IPC):**  
**B65G 47/86, A61F 13/15, B65H 29/24****Technical fields searched (IPC):**  
B65G, A61F, B65H

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	US 10266362 B2 (JOA CURT G INC [US]) 23 April 2019 (2019-04-23) * column 12, line 61 - column 13, line 19; figures 24-25 *	1-4, 10
X Y	EP 3254994 A1 (SIDEL PARTICIPATIONS [FR]) 13 December 2017 (2017-12-13) * paragraph [0017] - paragraph [0088]; figures 1-9 *	1, 8, 9 10
Y	US 2021104944 A1 (YAMAMOTO HIROKI [JP]) 08 April 2021 (2021-04-08) * paragraph [0093] - paragraph [0133]; figure 12 *	10
A	WO 2018085830 A2 (JONES & CO INC R A [US]) 11 May 2018 (2018-05-11) * paragraph [0070]; figures 20-24 *	5-7

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search The Hague	Date of completion of the search 24 September 2024	Examiner Scheller, Johannes
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**CATEGORY OF CITED DOCUMENTS**

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|---|--|
| X: particularly relevant if taken alone   | P: intermediate document   |
| Y: particularly relevant if combined with another document of the same category | T: theory or principle underlying the invention                        |
| A: technological background   | E: earlier patent document, but published on, or after the filing date |
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| & : member of the same patent family, corresponding document                    | L: document cited for other reasons                                    |

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ANNEX TO SUPPLEMENTARY EUROPEAN  
SEARCH REPORT

Application number:  
EP 22 84 92 74

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on 24-09-2024  
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Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 10266362	B2	23-04-2019	US	2013239764 A1	19-09-2013
			US	2018186593 A1	05-07-2018
			US	2019241393 A1	08-08-2019
EP 3254994	A1	13-12-2017	NONE		
US 2021104944	A1	08-04-2021	EP	3799847 A2	07-04-2021
			JP	7237791 B2	13-03-2023
			JP	2021059396 A	15-04-2021
			US	2021104944 A1	08-04-2021
WO 2018085830	A2	11-05-2018	US	2018127218 A1	10-05-2018
			US	2019241371 A1	08-08-2019
			WO	2018085830 A2	11-05-2018